

REMARKS / ARGUMENTS

I. Status of the Claims

Claims 1, 2, 4-42, and 44-64 are currently pending in this application. Claims 3 and 43 have been cancelled herein. Claims 1, 23, 35, 58, 63, and 64 are currently amended herein. New claims 65-70 have been added.

II. Rejection of Certain Claims Under 35 U.S.C. § 102(b)

Claims 1, 2, 4-5, 8-11, 13-19, 26, 27, 29-31, 35-37, 41, 42, 44-53, 55-57, 59 and 60 stand rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Pat. No. 5,311,940 to LaFleur. (hereinafter, "*LaFleur*"). As noted above, claim 3 has been cancelled herein.

A. Claims 1, 2, 4-5, 8-11, 13-19, 26, 27, and 29-31

Applicant has amended independent claim 1 to recite the additional limitation of applying a differential pressure across the dart to activate the plug. Applicant defined the term "activate" in his specification as follows:

As referred to herein, the term "activate" will be understood to mean causing the plug to be deployed so as to carry out an intended function within the drill pipe. For example, a plug may be activated so as to cause it to detach from a work string and travel through the drill pipe in order to serve as a spacer between different fluids that are desirably segregated.

(Specification, at [0022].)

In the Office Action, the Examiner has stated:

LaFleur discloses a dart 152 for activating a plug located in a well. Plug 152 engages a bottom plug and is received into the plug, at least nose section 160. Plug or dart 152 has a mandrel 156 and a foam body 158 attached to the mandrel. . . . [O]nce dart 152 lands in the lower plug, pressure behind the dart activates or drives the plug and dart downward.

(Office Action, at 2.) Applicant respectfully traverses the Examiner's statement that "once dart 152 [of *LaFleur*] lands in the lower plug, pressure behind the dart activates or drives the plug and dart downward." Applicant respectfully submits that the Examiner has not identified any portion

of *LaFleur* that discloses the use of *LaFleur*'s self-described "flex plug 152" in a manner that so much as contacts another plug located in a well, much less activates such plug located in a well.

Applicant respectfully submits that at most, *LaFleur*'s "flex plug 152" is disclosed to land atop a "receiving device" within a casing, after which continued application of pressure behind the flex plug 152 causes the foam body 158 of the flex plug to separate from the mandrel 156; the foam body 158 then compresses against the receiving device, to enhance the seal achieved between the flex plug 152 and the receiving device. Applicant draws support for this construction of *LaFleur* from the following passage therein:

When the nose 160 [of "flex plug 152"] lands in a receiving device located in the casing, the second cylindrical body portion 158 separates from the first cylindrical body portion 156 under the influence of hydraulic pressure to enhance the seal between the plug 152 and the casing.

(*LaFleur*, Col. 10, ll. 2-7.)

Applicant respectfully submits that this does not amount to a disclosure of "activating a plug located within a subterranean well bore," as required by Applicant's independent claim 1, as amended. First, in the excerpted portion of *LaFleur*, the "receiving device located in the casing" is not expressly disclosed to be a plug located within the casing; it may be, for example, a float collar. Second, the landing of the flex plug 152 against the receiving device, and the subsequent application of pressure is not expressly disclosed to activate the receiving device (*e.g.*, to cause the receiving device to be deployed so as to carry out an intended function within the casing) in any way. The landing of the flex plug 152 against the receiving device is not disclosed to move the receiving device through the casing, for example. Rather, the landing of *LaFleur*'s flex plug 152 against the receiving device, and the application of hydraulic pressure, are only expressly disclosed to enhance the seal between the flex plug 152 itself and the casing.

Applicant respectfully submits that the Examiner has not shown *LaFleur* to disclose the use of a dart to activate a plug in a subterranean well bore, as required to anticipate Applicant's claim 1, as amended. Accordingly, Applicant respectfully submits that Applicant's independent claim 1, as amended, and all claims that are dependent therefrom, have not been shown to be anticipated by *LaFleur*. Applicant respectfully requests withdrawal of the rejection

under 35 U.S.C. 102(b) against these claims, and further requests the timely issuance of a Notice of Allowance for these claims.

B. Claims 35-37, 41, 42, 44-53, 55-57, 59 and 60

Applicant has amended independent claim 35 to recite the additional limitation of an elastic tether attached to the mandrel and to the foam body of the claimed dart. Applicant respectfully asserts that the Examiner has not shown *LaFleur* to disclose a dart for activating a subterranean plug located within a subterranean well comprising a mandrel, a foam body attached to the mandrel, and an elastic tether attached to the mandrel and to the foam body. Accordingly, Applicant respectfully submits that independent claim 35, as amended, and all claims that are dependent therefrom, have not been shown to be anticipated by *LaFleur*. Applicant respectfully requests withdrawal of the rejection under 35 U.S.C. 102(b) against these claims, and further requests the timely issuance of a Notice of Allowance for these claims.

III. Rejection of Certain Claims Under 35 U.S.C. § 103

Claims 12, 20, 21, 26, 38, 54 and 56 stand rejected under 35 U.S.C. § 103 as being unpatentable over *LaFleur*. Applicant respectfully traverses.

Claims 12, 20, 21, and 26 are indirectly dependent from amended claim 1. As discussed in greater detail in Part II.A. above, Applicant respectfully submits that the Examiner has not shown *LaFleur* to disclose all the elements of Applicant's claim 1, as currently amended. Accordingly, Applicant respectfully submits that the Examiner has not shown *LaFleur* to obviate claims 12, 20, 21, and 26, which depend indirectly from amended claim 1.

Claims 38, 54 and 56 are indirectly dependent from amended claim 35. As discussed in greater detail in Part II.B. above, Applicant respectfully submits that the Examiner has not shown *LaFleur* to disclose all the elements of Applicant's claim 35, as currently amended. Accordingly, Applicant respectfully submits that the Examiner has not shown *LaFleur* to obviate claims 38, 54 and 56, which depend indirectly from amended claim 35.

Accordingly, Applicant respectfully submits that the referenced claims are not rendered obvious by *LaFleur*, and that the cited claims are novel and nonobvious over the art of record. Applicant respectfully requests withdrawal of the rejection of these claims under 35 U.S.C. 103, and further requests the timely issuance of a Notice of Allowance for these claims.

SUMMARY

In light of the above remarks, Applicant respectfully requests reconsideration and withdrawal of the outstanding rejections. Applicants further submits that the application is now in condition for allowance, and earnestly solicit timely notice of the same. Should the Examiner have any questions, comments or suggestions in furtherance of the prosecution of this application, the Examiner is invited to contact the attorney of record by telephone, facsimile, or electronic mail.

Applicant believes that there are no fees due in association with this filing of this Response. However, should the Commissioner deem that any fees are due, including any fees for extensions of time, Applicant respectfully requests that the Commissioner accept this a Petition Therefor, and direct that any additional fees be charged to Baker Botts L.L.P. Deposit Account No. 02-0383, (*formerly Baker & Botts, L.L.P.*,) Order Number 063718.0165.

Respectfully submitted,

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